

It was noticeable that better results were obtained when treatment was instituted in the early stages of the disease, when lesions were confined to one side of the neck. It is quite probable that if patients in whom the lesion was confined to the tonsil or to a few glands of the neck presented themselves for treatment, they might be cured by complete tonsillectomy and excision followed by postoperative roentgen treatment; certainly these methods should be given a thorough trial in cases in the incipient stages of the disease. The authors are of the opinion that radium will produce fully as good results as the roentgen rays in Hodgkin's disease. The results obtained by various methods of treatment over a period of three years' observation are summarized. The authors note that of the thousands of patients treated there are only two authentic cases in which the patients are reported symptom-free after five years.

The Diagnosis and Serum Treatment of Anterior Poliomyelitis.—ZINGHER (*Jour. Am. Med. Assn.*, 1917, lxxiii, 817) gives a summary of cases of poliomyelitis treated with immune and normal human serum. It is interesting to see that of 51 preparalytic cases treated with immune serum, 44 remained free from paralysis, while of the 10 who developed some form of paralysis, 5 made a complete final recovery. The results with normal serum seem to be very favorable, but the number of cases treated in the preparalytic stage of the disease is too small, and a larger series of cases should first be treated before final deductions are made. The author says it is difficult to state how many of the patients treated with serum would have remained free from paralysis without serum treatment. It seemed, however, that the action of serum in poliomyelitis is beneficial; that the use of serum from recent immune donors is preferable to normal serum, but that human serum is indicated in the treatment of the acute stages, especially in the preparalytic period of the disease. When carefully observed and controlled, the treatment is harmless. A distinct reaction follows in some of the cases after the first dose; the reaction is less marked after the second, and little, if any, is noted after the third injection of serum. Two groups of cases seemed to give an unfavorable prognosis even in the earlier stages of the disease. One was the fulminating bulbar type with a rapidly progressive involvement of the respiratory center. The second type was a rapidly developing spinal paralytic form. In the latter cases, which were treated after the paralysis had already made a distinct headway and was beginning to involve the muscles of respiration, the serum showed possibly in a certain proportion of cases an inhibitory effect on further progress, which resulted in a saving of life. It is difficult to forecast, however, what the natural result of the disease would have been in these cases. Control patients without serum, in whom the muscles of respiration were involved at the time the patients came under observation, have also recovered. It seemed, however, that a larger number of serum-treated patients of the same degree of severity had remained alive than would have without the use of serum. No very definite judgment of the value of serum can be based on the results obtained in these cases. Yet, as a possible life-saving procedure, the author would continue to use the serum even in these cases and in the course of time obtain more definite

results. In his conclusions the author states that the injection of immune and of normal human serum into the spinal canal during the acute febrile stage of poliomyelitis causes a distinct cellular reaction which is mostly polynuclear in type. The phagocytic action of these cells is beneficial in poliomyelitis. Such action is enhanced in immune serum by the presence of specific antibodies. It is preferable to use fresh serum, or serum which has been obtained under sterile precautions, passed through a Birkefeld filter and bottled without the addition of a preservative. The presence of a preservative and of hemoglobin in serum enhances its irritating effect, and gives rise to the more severe types of reaction. For purposes of treatment, it is important to diagnose the cases during the preparalytic stage of the disease by the typical group of early symptoms and the changes in the spinal fluid.

A Note on Sublingual Medication.—COOPER (*The Practitioner*, 1916, xevii, 493) endorses the sublingual administration of hypodermic tablets in many cases where hypodermic medication seems inevitable, as in cases of severe vomiting, coma, esophageal obstruction, etc. The great advantage of the method is that it does not require any apparatus nor sterilization. He believes that this method has proved very effectual and is practically as prompt in action as when the remedies are used hypodermically.

The Treatment of Certain Diseases of the Skin by the Intravenous Injection of Foreign Protein.—ENGSMAN and McGOERY (*Jour. Am. Med. Assn.*, 1916, lxvii, 1741) report the treatment of several forms of skin disease with the parenteral injection of foreign protein. The protein was obtained by using suspensions of typhoid organisms. The results were very favorable in such conditions as lupus, erythematosis, psoriasis, and several other types of dermatosis. Although the immediate results were satisfactory the treatment was often followed by relapse. They do not recommend this treatment for general use as yet but believe that its results are worthy of much further investigation.

The Diagnosis and Treatment of Hookworm Disease.—BILLINGS and HICKLEY (*Jour. Am. Med. Assn.*, 1916, lxvii, 1908) say that thymol is the anthelmintic almost universally administered throughout the United States in the treatment of hookworm disease, and it was used exclusively in their hospital until one year ago, when oil of chenopodium was substituted. Since that time, owing to the encouraging results obtained, oil of chenopodium has been adopted as the regulation treatment to the exclusion of all others, the oil being of the variety known as the Baltimore oil. Compared with thymol, oil of chenopodium gives markedly better end-results, and its value is further enhanced by the facts that not only is it followed by fewer disagreeable after-effects but with its use no dietetic precautions need be exercised either before or during its administration. The routine course of treatments for adults is as follows: Preparatory treatment: At 7 A.M. magnesium sulphate, saturated solution 60 c.c. At 7 P.M., sodium sulphate, saturated solu-